MSMS Tele-Town Hall

Race Inequalities and COVID-19: Contagion, Severity, and Social Systems

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MICHIGAN STATE MEDICAL SOCIETY

RACE INEQUALITIES AND COVID-19:
CONTAGION, SEVERITY, AND SOCIAL SYSTEMS

Jason Adam Wasserman, PhD
OAKLAND UNIVERSITY WILLIAM BEAUMONT **SCHOOL OF MEDICINE**

Background

- COVID-19 is affecting some groups at disproportionately high rates compared to others, both in terms of prevalence and severity of outcome.
- African-Americans have been especially hard hit.
- This opens up the need to interrogate the reasons behind the inequalities emerging in the epidemiology of the disease.
- Obviously, the virus itself is not racially biased.
  (Current evidence for genetic explanations appear weak and conflicting)
- But social systems--from residential arrangements, to work, to health care--draw down on a long history of inequality.
- As the virus works it's way through these social systems, it is filtered through inequality and leads to unequal consequences.

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State of Michigan

as of May 15th, 2020

Race	Percent in State	Percentage of Overall Cases by Race	Percentage of Deceased Cases by Race
American Indian or Alaska Native	0.7%	<1%	<1%
Asian/Pacific Islander	3.4%	2%	1%
Black or African American	14.1%	32%	40%
Caucasian	79.3%	36%	50%
Multiple Races	2.5%	8%	2%
Other	--	5%	2%
Unknown	--	17%	5%

Totals may not add to 100% due to rounding
Data from two different sources, using slightly different race/ethnicity breakdowns

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Data

Variable	Catchment Population	COVID-19 Assoc. Hospitalization
Hypertension	29% overall 7.5% - 63% across age groups	50% overall 18% - 73% across age groups
Obesity	42% prevalence (age adjusted) 40% - 43% across age groups	48% prevalence 41% - 59% across age groups
Diabetes	9.5% overall (age adjusted)[1] 2.7% - 23.1% across age groups[1]	28.3% overall 19.6% - 32.1% across age groups

[1]Data pulled from KFF

- CDC MMWR April 17, 2020

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Data

Variable	Catchment Population	COVID-19 Assoc. Hospitalization
Sex	49% Male	54% Male
Race/ethnicity	59% White	45% White
	18% Black	33% Black
	14% Hispanic	8% Hispanic

- CDC MMWR April 17, 2020

- The overlap of these data with comorbidities helps us explain some of the disparity in severity, but not in prevalence to begin with.

- Moreover, it's really only a beginning with respect to understanding how race affects health. (That is, the fact that African Americans have higher rates of diabetes isn't the end of the inquiry, it's the beginning).

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Historical Background

- Medicine and Slavery
  - Taking care of their property
  - African and Caribbean folk practices
  - Environmental conditions
- Post-Slavery
  - Poverty exacerbated by lack of access
  - Higher rates of pneumonia, diarrheal diseases, and TB
  - Higher utilization of folk medicine
  - Inability to purchase insurance
  - Grave Robbers and Night Riders
- Samuel Cartwright (1851) found high rates among slaves of:
  - - Drapetomania
  - - Dysaethesia aethiopica
  - “From the careless movements of the individuals affected with the complaint, they are apt to do much mischief, which appears as if intentional, but is mostly owing to the stupidness of mind and insensibility of the nerves induced by the disease.”

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Historical Background (cont.)

- Medical Experimentation
  - Thomas Hamilton and John Brown (aka “Fed”)
  - J. Marion Sims
  - X-Rays and the “negro problem”
  - Lyles Station
  - Tuskegee Syphilis Study

- Herrnstein and Murray (1994) The Bell Curve
  - Intellectual inferiority of African Americans and other minorities
  - “Policies may fail not because they are inherently flawed but because they do not make allowances for how much people vary. There are hundreds of ways to frame bits and pieces of public policy so that they are based on a realistic appraisal of the responses they will get not from people who think like Rhodes scholars, but people who think in simpler ways”

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Structural Accumulation of Disadvantage

"Cumulative disadvantage theory emphasizes how early advantage or disadvantage is critical to how cohorts become differentiated over time. Not only do the early risk factors shape trajectories in the short-term outcomes but in the long-term outcomes as well. The effects of risk factors accumulate over the life course, thereby increasing heterogeneity in later life."

-Ferraro and Kelley-Moore 2003

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(Probable) Precursors to COVID-19 Experience

- Prevalence
  - Residential segregation
  - Residential density
  - White flight
  - Frontline/essential work
- Severity
  - Comorbidities
  - Delayed health care seeking
  - Clinical communication disparities

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Race and Rationing

- Recent attempts to develop rationing protocols (mainly for ventilators) have raised concerns about race-discrimination.
    - Expected life years
    - Survival to 1 year or to 5 years
    - Comorbidities (but even if not used as an exclusion criteria per se…)
    - SOFA
        - *PaO2 / FiO2* (African Americans have higher prevalence ARDS; Casanova et al. 2016)
        - *Hypertension* (African Americans more likely to have hypertension; Lackland 2015; Saeed, Dixon, and Yang 2020)
        - *Creatinine levels* (African Americans tend to have higher serum creatinine levels and nearly 4x as likely as whites to have ESRD; Jones et al. 1998; Norris and Yagoda 2005)
- At the same time, it was never possible to correct hundreds of years of systematic oppression with a clinical algorithm.

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Concluding Remarks

- Long history of systemic racism has accumulated health disadvantages over time.

- COVID-19, like so many other illnesses does not necessarily exploit race itself, but it exploits the numerous racialized social conditions in our society.

Questions?

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Thank you!

For updated information on COVID-19, visit www.msms.org

If you have additional questions, email rblake@msms.org

MSMS
MICHIGAN STATE MEDICAL SOCIETY
120 West Saginaw Street, East Lansing, Michigan 48823
Tel: (517) 337-1351 **eMail:** msms@msms.org